

REMARKS

STATUS OF THE CLAIMS

Claims 10-16 were examined and remain pending. Claims 10-16 stand rejected. Claims 10 and 14 are currently amended. No new claims have been added. Claims 1-9 were previously cancelled. Claims 11-13 are herein canceled.

RESPONSE TO CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

Of the claims that are not herein cancelled, Claims 10 and 14-16 are rejected under § 103 for obviousness in view of U.S. Patent No. 7,181,451 to Dehlinger et al. (hereinafter “Dehlinger”) and U.S. Patent No. 5,675,711 to Kephart et al. (hereinafter “Kephart”). Accordingly, Applicant traverses these rejections as outlined below and as discussed in the telephone interview held on September 8, 2008.

Independent Claims 10 and 14

With regard to Claim 10, and as agreed to by Examiner Adams in the telephone interview, the amendments to Claim 10 are sufficient to overcome the prior art of record, because the prior art of record alone or combined fails to teach generating a word list that includes **“a part of speech corresponding to each word,”** and **“filtering the word list to eliminate the words that are identified as a particular part of speech.”** Support for this amendment can be found in the specification on page 10, lines 17-18.

Also as agreed to in the telephone interview, the prior art of record alone or combined fails to teach **“a distinct given standard defined for each category...the given standard defined as the product of the number of documents in a corresponding category and a predefined threshold value.”** This amendment is supported in the specification on page 12, lines 1-16 and in Figures 5A-5C. None of the references of record appear to teach the use of a distinct standard separately defined for each category, and none of the references appear to teach wherein the given standard is defined as the product of the number of documents in a corresponding category and a predefined threshold.

Finally, and also as agreed to in the telephone interview, the prior art of record alone or combined fails to teach **“generating a document classification catalog by eliminating words determined to be unnecessary words from each of the word lists, the document classification catalog comprised of a plurality of vector spaces wherein each vector space represents at least one category, each vector space comprising the number of occurrences of the remaining words in the word list of a corresponding category,”**

“receiving a target classification document and generating a document vector for the target classification document, wherein a distance is defined between the document vector and each of the plurality of vector spaces such that the distance indicates a degree of similarity between the target classification document and a category represented by the vector spaces,” “identifying the category corresponding to the vector space with the least distance between the vector space and the document vector,” and “assigning the target classification document to that category.” Support for these amendments can be found on page 15, line 18 – page 17, line 25 and Figures 8A and 8B.

As pointed out in the Office Action, U.S. Patent No. 7,099,819 to Sakai et al. (hereinafter “Sakai”) teaches the use of vector spaces to compare one frequency vector with another to determine a similarity between two texts. However, Sakai teaches generating a frequency vector for each text in a category, and then finding an average of the frequency vector of each word to generate a “representative vector corresponding to a representative text of the category.” See Sakai, col. 4:1-4.

Further, taking the present invention as whole as recited in Claim 10, Sakai fails to teach using vector spaces that are representative of categories after the unnecessary words have been eliminated. Conversely, Claim 10 recites each vector space comprising the number of occurrences of the remaining words in the word list of a corresponding category. Therefore, as discussed in the telephone interview, Sakai fails to teach the use of vector spaces as recited in Claim 10.

Therefore, because the prior art of record fails to teach the subject matter recited in amended Claim 10, Applicants submit that Claim 10 is patentable over the cited references and is in condition for prompt allowance.

Claim 14 has also been amended to include several limitations substantially similar to those recited in Claim 10 including: “filtering the words to eliminate the words that are identified as a particular part of speech,” and “a distinct given standard defined for each category, the given standard defined irrespective of the number of occurrences of the word in the first category, the given standard defined as the product of the number of documents in a corresponding category and a predefined threshold value.” Therefore, Applicant submits that Claim 14 is also patentable over the cited references for the reasons stated above with regard to Claim 10.

Dependent Claims 15-16

Applicant respectfully submits that dependent Claims 15-16 are allowable as depending from allowable Claim 14. Therefore, Applicant requests that the rejection of these claims be withdrawn.

CONCLUSION

As a result of the presented amendments and remarks, Applicants assert that Claims 10 and 14-16 are patentable and in condition for prompt allowance. Should additional information be required regarding the amendment or traversal of the rejections of the independent and dependent claims enumerated above, the Examiner is respectfully asked to notify Applicant of such need. If any impediments to the prompt allowance of the claims can be resolved by a telephone conversation, the Examiner is respectfully requested to contact the undersigned.

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Respectfully submitted,

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